HematoVision - Ideation Phase

Project Title
HematoVision - Blood Cell Classification using AI

Team
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Institution
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Objective
To build an AI-powered web application that classifies blood cell images into Eosinophils, Neutrophils, Monocytes, or Lymphocytes using a CNN and transfer learning.

Problem Statement
Manual classification of blood cells is time-consuming and error-prone. Automating this process using machine learning can improve diagnostic speed and accuracy.

Solution Approach
- Use a pre-trained CNN (e.g., MobileNet or ResNet)
- Build a web interface using Flask
- Use Kaggle's annotated dataset of blood cell images.

Key Features
- Image upload and prediction
- Result visualization
- Trained model integration
- Lightweight deployment